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ABSTRACT

A study was conducted of the economic impact of San Juan College (SJC) in Farmington, New Mexico, on businesses and employment in San Juan County during fiscal year (FY) 1991-92. The five components used to measure the college's tangible economic impact on the local community were SJC's total expenditures in FY 1991-92 used to buy goods and services from businesses and agencies in the county; the portion of employee salaries and wages spent in the county; student expenses in the community related to college attendance; local expenditures of persons who visited the county because of the college or its employees; and the indirect business volume generated by these direct expenditures. This indirect business volume is the result of re-spending by the initial recipient, and is estimated through the application of a mathematical multiplier. Data were drawn from business office records, a survey of faculty and staff, and estimates of student and visitor expenditures. Study results for FY 1991-92 included the following: (1) total direct SJC operating and construction expenditures in the county were $4.2 million; (2) local expenditures by employees totalled $3.5 million; (3) estimated student expenditures totalled $7.6 million; (4) direct SJC economic impact on the San Juan County totalled $15.4 million, with an additional indirect impact of $15.4 million, for a total of $30.8 million, representing 5.1 times the total county fiscal support to the college during the same period; (5) college direct employment and support positions created a total of 1,329 full-time positions in the county; and (6) total SJC economic impact on the county showed a 50% increase since FY 1987-88. Data tables are included. (PAA)

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THE ECONOMIC IMPACT OF SAN JUAN COLLEGE ON SAN JUAN COUNTY, NEW MEXICO 1991-92

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February 1993

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THE ECONOMIC IMPACT OF SAN JUAN COLLEGE ON SAN JUAN COUNTY, NEW MEXICO 1991-1992

The contributions of a college to the community in which it is located are most often measured in terms of number of students enrolled, number of degrees granted, local employees trained in new job skills, and activities that contribute to community cultural and recreational enrichment. Another kind of contribution of a college to the community is the local dollars spent to operate the institution, conduct the classes, and pay student expenses of attendance. The purpose of this study was to measure some of the major economic contributions of San Juan College to businesses and employment in San Juan County during the fiscal year 1991-1992.

The model used for this study included five major components of the college's tangible economic impact on the local community: (1) the portion of the college's total expenditures in 1991-1992 used to buy goods and services from businesses and agencies in San Juan County; (2) the portion of employee salaries and wages spent in San Juan County; (3) student expenses in the community for books and supplies, transportation, and other expenses related to attending college; (4) local expenditures of persons who visited the county because of the college or its employees; and (5) the indirect business volume generated by these direct expenditures.

Other economic benefits of a college to its community are significant but impossible to measure, such as the economic benefit derived from having a trained and educated workforce available for local businesses or helping attract new businesses that contribute to economic development. Additional contributions that are not represented in this study include the expansion of credit available for loan by local financial institutions through college deposits in local savings and checking accounts, increases in sales and property taxes collected by local governments due to college expenditures, employee investments in local property, and numerous other tangible but difficult-to-measure impacts.

As shown in Figure 1, money flowing to county businesses directly from the college or through employees and students make up the bulk of direct college-related local purchases of goods and services. However, this is not the end of the transaction, for part of each dollar spent in the local economy is then re-spent within the business community through additional local purchases by the initial vendor. This cycle is repeated in smaller and smaller amounts for several rounds. This spending cycle is known as the recycling or "multiplier" effect of the original expenditures. The multipler effect produces an indirect but tangible impact in addition to the initial, direct expenditures.

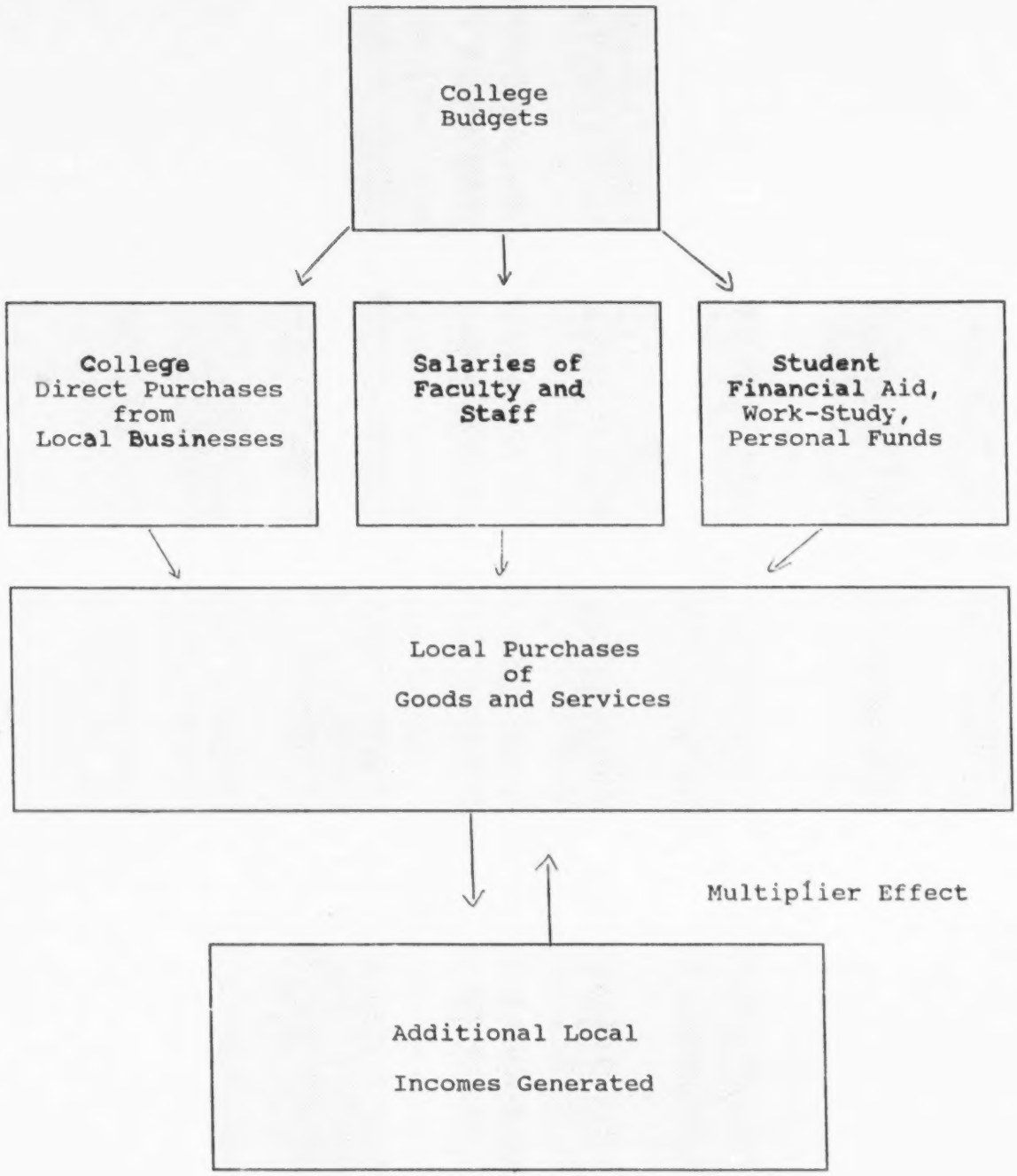
College Budgets
College Direct Purchases from Local Businesses
Salaries of Faculty and Staff
Student Financial Aid, Work-Study, Personal Funds
Local Purchases of Goods and Services
Multiplier Effect
Additional Local Incomes Generated

FIGURE 1: COMPONENTS OF ECONOMIC IMPACT

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Economic impact studies always relate to a particular geographic area such as, in this case, San Juan County. If the area is large and comprehensive, such as a state or multistate geographic region, the total indirect business volume that is generated as a result of direct expenditures may be as much as three or four times the direct impact. Or, if the area under study is limited to a small geographic area such as a city, the indirect business volume that is generated may be only a fifth or a half of the direct expenditures because it is necessary to buy many goods and services from vendors outside the city. The ratio of total direct and indirect spending to initial, direct spending is referred to as the multiplier.

In this study, a relatively conservative multiplier of 2.0 seemed appropriate for the San Juan County area. Many items must be purchased from outside the community but, on the other hand, wholesale and retail trade is considerably more available than is usual for a county of 92,000 population. A multiplier of 2.0 means that eventually the direct dollars spent in the county by the college and its employees, students, and visitors are estimated to double through additional local spending from the incomes to other local residents that result from the initial expenditures.

Another way of thinking about economic impact, in addition to the flow of dollars through the local economy, is in terms of the number of jobs created in the community as a result of the college's presence. In addition to persons employed directly by the college, college-related expenditures are used to create jobs in local businesses that are needed to supply the goods and services purchased by the college and its employees, students, and visitors. This study also used total direct expenditures in 1991-92 to estimate the total number of full-time jobs in the county that resulted directly or indirectly from the college's operation.

A similar study of the economic impact of San Juan College on San Juan County was conducted for the fiscal year 1987-1988. That study also used a multiplier of 2.0 to estimate both direct and indirect expenditures in the county. At that time, direct college contributions to the local economy were estimated to be almost $10.9 million with a total direct and indirect impact of $18.4 million. These expenditures in the county were 3.3 times the local millage support of $5.6 million to the college in 1987-88.

Estimates of Direct and Indirect Expenditures

The estimates of direct expenditures used in this study are outlined in detail in an accompanying Technical Appendix and briefly summarized in the following paragraphs. These direct expenditures are based on college business office records, a survey questionnaire to members of the faculty and staff, and estimates of student and visitor expenditures. As noted earlier, other important but hard-to-measure impacts have not been attempted. All expenditures are for the fiscal year 1991-1992. Funds are counted

only once, and are assigned to the group that buys directly from community vendors. Thus, salaries and wages are not included as a college expenditure because these funds are spent by members of the faculty and staff; similarly, tuition and fees paid to the college are not counted as student expenditures because the college spends these funds in the community. In all matters requiring a decision, conservative alternatives and assumptions were selected in order to minimize the likelihood of over-representing the economic impact of the college on the local community.

Direct expenditures of the college to businesses and agencies in San Juan County were summarized from accounting records in the college business office. These direct expenditures exclude all wages and salaries (which were spent by employees), all financial aid funds (which were spent by students), internal transfers, and self-supporting services such as the bookstore and food service. Funds for the college purchase of operating goods and services came from county property taxes, a state allocation based on enrollment, and student tuition and fees. Expenditures for capital improvements to the campus, such as building construction and new parking lots, were computed separately and adjusted for expenditures outside the county. Primarily, these funds came from state appropriations or local bond issues. In 1991-92, total direct college operating and construction expenditures in the county totalled $4.2 million with more than $1.3 million or 32 percent of the total in capital expenditures.

Employee local expenditures were based on net salaries and wages paid by the college in 1991-92 (omitting all taxes, retirement contributions and other withholding), the employee-paid benefits that flow back to the county in the form of charitable contributions and other voluntary withholding, payments from ERA to local retirees, and an estimate of paid health insurance claims. From the results of a staff questionnaire and other sources, it was estimated that 95 percent of the staff lived in the county, and that 70 percent of disposable income was spent within the county. These factors were used to estimate local expenditures by county residents. In addition, non-resident full-time employees were estimated to spend a conservative $1,000 per year in the county. After adjusting total net salaries and wages paid by the college in these ways, employee direct expenditures in the county in 1991-92 totalled almost $3.5 million.

Student local expenditures were estimated using budgets developed by the Office of Financial Assistance and approved by state and federal agencies to establish the financial need of students applying for financial aid. These budgets are very conservative, based on periodic surveys of enrolled students and including only expenditures for activities directly related to attendance for two semesters (9 months) at San Juan College. No tuition and fees were included, since these funds are spent by the college. Also, no student expenditures were included for the large number of high school, community service, and adult basic education classes attended by hundreds of students each year, or for student summer school expenses.

For 50 percent of the full-time students enrolled in credit classes in 1991-92, an allowance was made for room and board since it was assumed that these students would move to another county if San Juan College were not available. For all other students, only books and supplies, transportation, and 5incidental expenses were included. In addition, a childcare allowance for 24 percent of the full-time students was included, as well as special fees for flight training paid by students to Mesa Airlines. Using these guidelines for 1,152 full-time and 2,679 part-time students in 1991-92, the direct student expenditure in San Juan County totalled almost $7.6 million dollars. About 36 percent, or almost $2.7 million, came from non-county sources of financial assistance for students attending half-time or more.

A small but important fourth area of direct expenditures in the county are dollars spent by visitors who come to the county to attend programs or events at the college, as college speakers or potential employees, or as personal visitors to employees or students. Based on an estimate of 400 visitor-days in 1991-92 with an average expenditure of $112 per day, this contribution to the local economy totalled $44,800.

Figure 2 summarizes the total direct economic impact of these four components of $15.4 million dollars, with an additional indirect impact of $15.4 million for a total of almost $30.8 million dollars added to the economy of San Juan County in 1991-92. This economic contribution to the county represents a return on taxpayer investment of 5.1 times the $6.1 million received from county millage in the same year.

Full-Time Jobs Related to College Spending

During 1991-92 the college employed 187 persons full-time and about 200 persons part-time for a full-time equivalent employment of 253 persons not including students employed on work-study. This is the college's direct contribution to employment in the county. In addition, economists estimate that 0.00007 full-time jobs are created for each dollar added directly to an area's economy (Caffrey & Isaacs, 1971; Seybert, 1991.). Therefore, based on the direct impact spending of almost $15.4 million in 1991-92, the college contributed to the creation of an additional 1,076 full-time jobs in the county in order to provide necessary goods and services to the college and its employees and students. These support positions in addition to college direct employment resulted in a total estimate of 1,329 college-related full-time positions for the citizens of San Juan County in 1991-92.

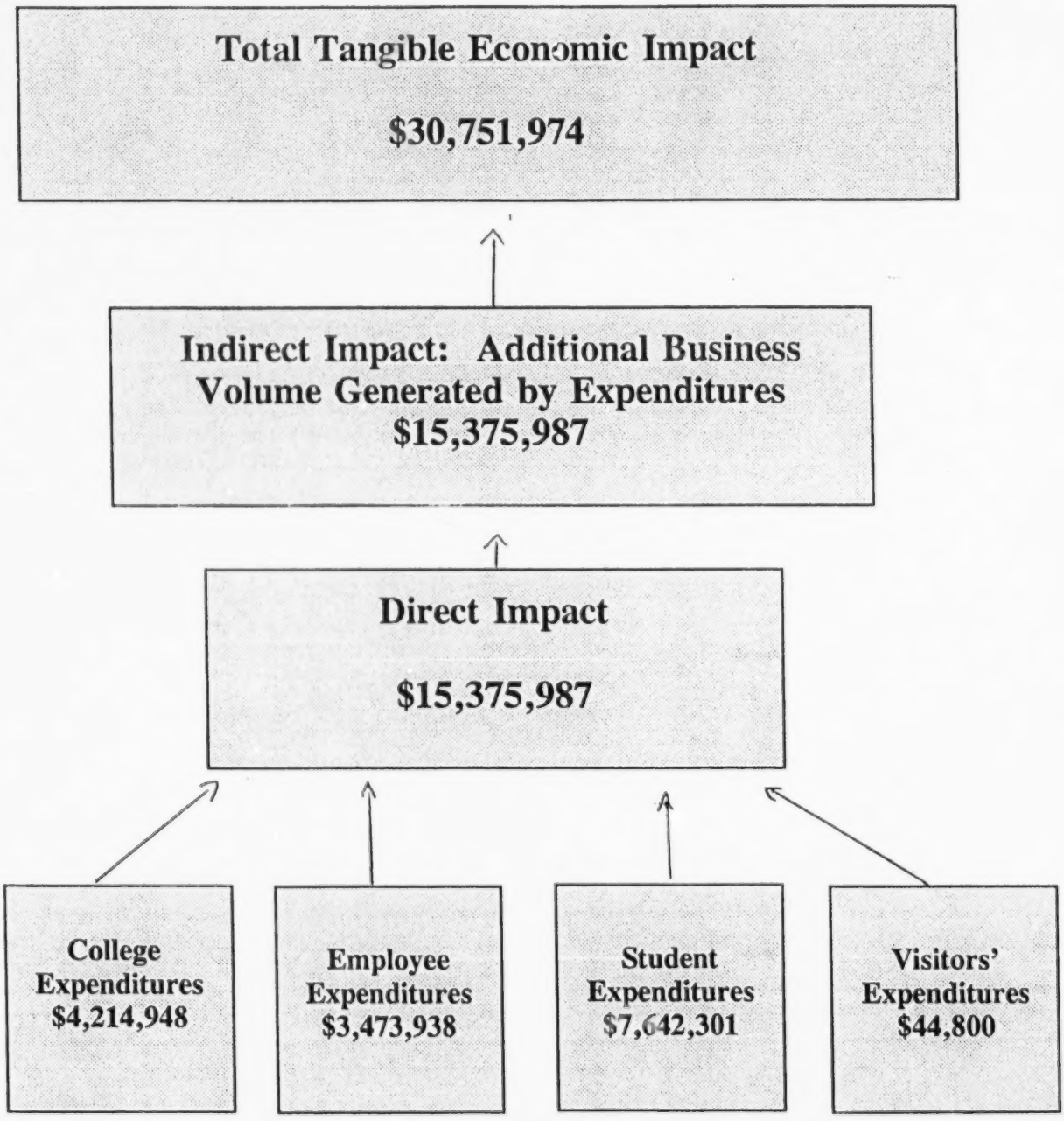

FIGURE 2: TOTAL TANGIBLE ECONOMIC IMPACT OF SAN JUAN COLLEGE ON SAN JUAN COUNTY in 1991-92

Profile of Full-Time Employee Spending

In April 1992 an employee survey regarding spending patterns in San Juan County during 1991-92 resulted in responses from about half of the full-time faculty and staff. Based on these results, the following profile of full-time employee expenditures emerged:

Live in San Juan County	95%
Number of persons per household	2-3
Median percent of total family income from San Juan College	71%
Own a home in the county (range from less than $30,000 to more than $150,000) Median estimated market value: $70,000 Median annual real estate taxes: $450 (range $100 - $1,200)	74%
Rent housing in the county Median monthly rent: $375 (range $165 - $750)	25%
Median utilities per month	$150
Median county general expenditures per month, not including housing costs (note: purchase of a home is considered an investment rather than expense)	$565
Median annual charitable contributions of cash and other goods	$410
One or more children in public school total estimated 145 children in public schools	48%
Median savings in county financial institutions	$1,000
Total gross college wages to full-time faculty & staff in 1991-92	$5,340,371

Summary

The results presented in this report indicate that San Juan College serves as a substantial producer of jobs in San Juan County, and as a consumer of local goods and services directly through college purchases and employee and student expenditures as well as indirectly through the "multiplier" effect of monies spent and respent within the county. The total tangible economic impact in 1991-92 amounted to almost $31 million, and an estimated 1,329 full-time jobs in the county. Total return to county taxpayers was more than five times the $6.1 million received from county taxes to support the college in 1991-92.

Compared with the economic impact study conducted in 1987-88, the college contribution to the county's economy has increased by roughly 50 percent over four years, from $10.9 million to $15.4 million direct economic impact and $18.4 million to $30.8 million total direct and indirect impact in 1991-92. The large increase in the college's contribution reflects a student credit enrollment increase of about 30 percent and an employee increase of about 27 percent over the four years. Also, it should be noted that these expenditures are in time-specific dollars not corrected for inflation. Nevertheless, the increase in the college's economic impact on the county is considerable over a fairly short period of four years, and has increased at a rate much higher than the 9 percent increase in funds to the college from county taxes over this same period of time.

Additional direct and indirect economic impacts on the county that were not measured in this study include additions to the local credit base through college and staff investment of funds in local banks, increased earning potential of graduates, increased knowledge and skills of local employees, contributions to economic development of the area, and facilities and programs to meet recreational and cultural interests of the community.

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TECHNICAL APPENDIX
SAN JUAN COLLEGE EXPENDITURES 1991-92

College Local Operating Expenditures

Total college expenditures (restricted and unrestricted) excluding gross wages and salaries (include college portion of benefits), all financial aid including work study, all internal transfers, taxes, bookstore, food service (SUB), golf course, construction and other capital improvement expenditures. Include equipment purchases (including capital expenditures for equipment), principal payments on indebtedness.

Among total expenditures above, business office calculates total expenditures in San Juan County for fiscal 1991-92, or examines one month of activity in each of three quarters to determine average percentage spent in the county. Identify expenditures by addresses of vendors.

If not included above, add in student activities expenditures in the county, and Foundation expenditures in the county (Foundation expenditures not included in 1988 or 1992 studies).

Total Expenditures	$6,036,651
In-County Expenditures	$2,676,674
Capital Equipment	+ 143,186
Student Activities	+ 55,000
	$2,874,860

College Local Construction Expenditures

Capital expenditures for building construction, parking lots, design and specifications of future buildings. Capital instructional equipment expenditures are included in total college expenditures above.

Business Office estimate - Total	$1,440,088
Adjustments for out-of-county in 1991-92	- 100,000
	$1,340,088

Note: Contractors in 1991-92 were all in-county. If major contractors are outside the county, in 1988 John Greer recommended the following adjustments:

1) Profit and Overhead:	-15%
2) Purchases out-of-county:	-20%
3) Assume all employee payments were in-county	

"capital expenditures" are those funded by state appropriations or local bond issues.

Total College Local Expenditures: $4,214,948

Employee Local Expenditures

Net salaries and wages paid by the college in 1991-92, excluding work-study students, state and federal taxes, social security, ERA. Include grant funded employees and regular student employees. If employee-paid benefits are excluded, add them back in (see below).

Net salaries & wages (Bus. Office) 187 FT employees, 200 PT employees (Personnel Office) 187 + 1/3 (200) = 187 + 66 = 253 FTE employees Total payroll of $6.5 million	$4,623,786
Benefits and withholdings that flow back to the county from employee-paid benefits:	
Withholding in-county + 1/3 health benefits paid by the college as estimate of employee payments for health insurance	+ 311,647
Retired employees living in the county (estimate 5 x $15,000 each)	+ 75,000
Health insurance claims paid (est. from 87-88 EQUICOR report of $157,379 in claims paid)	200,000
Total available income	$5,210,433
x 95% in-county residents x 70% available income spent in-county	3,464,938
5% (9) FT staff from out-of-county spending in-county at $1,000 each	+ 9,000
Total Employee Local Expenditures:	$3,473,938

Student Local Expenditures

Local purchases related to attending college, not including tuition and fees paid to the college and spent by the college. Financial aid budgets of student annual expenditures, approved by state and federal agencies, were used to estimate costs for all students of attending college for two semesters.

1. Full-time = 1152 students

a) 50% (576 students) who would leave the county to attend school elsewhere. Half dependent and half independent*

	Dependent	Independent
Books and Supplies	$ 400	$ 400
Room and Board	1,500	3,375
Personal Expenses	590	850
Transportation	784	800
	$ 3,274	$ 5,425
Total Expenditures to attend SJC for 9 months	$942,912	$1,562,400
	$2,505,312	

b) 50% (576 students--remaining full-time students) half dependent and half independent* (local residents and therefore no allowance for room & board)

	Dependent	Independent
Books and Supplies	$ 400	$ 400
Personal Expenses	590	850
Transportation	784	800
	$1,774	$ 2,050
Total Expenditures to attend SJC for 9 months	$510,912	$590,400
	$1,101,312	

2. Part-time = 2,679 students

Half dependent and half independent*
Adjusted financial aid student budget

	Dependent	Independent
35% of books & supplies	$ 140	$ 140
50% of personal expenses	285	425
75% of transportation	588	600
	$1,013	$ 1,165
Total Expenditures to attend SJC for 9 months	$1,356,407	$1,561,100
	$2,917,507	

*Note: the financial aid office estimates that in 1991-92, 70% of aid applicants were independent financially and 30% dependent. A more conservative 50% split is used here to represent all students.

3. Estimate number of students eligible for financial aid child care allotment (single parent or both parents employed), full-time students at $1500 for one child, $3000 for two or more.

12%* of full-time (138) at $1500	$207,000
12% of full-time (139) at $3000	$417,000

4. Mesa Airlines flight training fees paid through the college $494,170

Grand Total Student Local Expenditures: $7,642,301

*Note: financial aid office estimates that in 1991-92, 25% of applicants were eligible for a child care allotment.

Visitor Expenditures

Lodging, meals and incidentals for persons who come to the county because of the college - e.g. job interviews, cultural events, meetings, visitors to faculty or staff, etc.

Estimate 400 visitor-days at $112 per day (Visitor's Bureau estimate of per person expenditures) $44,800

Other Information Needed For the Report

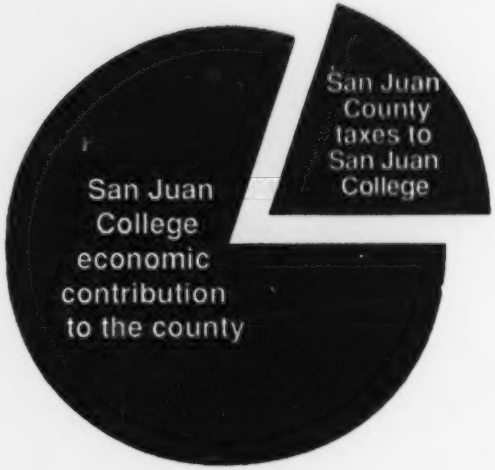
1. Total expenditures for financial assistance, including loans, and unduplicated headcount from Office of Financial Aid annual report.

2. Total gross expenditures for salary and wages (in addition to net of taxes and retirement) - business office.

SAN JUAN COLLEGE

- PUTS 5 TIMES MORE MONEY INTO THE LOCAL ECONOMY THAN TAXPAYERS INVEST IN THE COLLEGE
- ADDS TO LOCAL CREDIT BASE THROUGH COLLEGE AND STAFF INVESTMENT OF FUNDS IN LOCAL BANKS
- CREATES JOBS TO SUPPORT COLLEGE GENERATED BUSINESS
- DEVELOPS A SKILLED LABOR FORCE THAT ATTRACTS NEW BUSINESSES
- INCREASES EARNINGS OF GRADUATES
- BRINGS DOLLARS INTO THE COUNTY THROUGH NEW CONSTRUCTION
- DRAWS VISITORS TO THE AREA THROUGH CONFERENCES, WORK-SHOPS, PROGRAMS, ETC., WHO SPEND AN AVERAGE OF $112 EACH IN THE COUNTY
- BRINGS FEDERAL AND STATE DOLLARS INTO THE COUNTY THROUGH SUBSIDIES, GRANTS, AND STUDENT FINANCIAL AID

San Juan College– an investment in the future!



SAN JUAN COLLEGE
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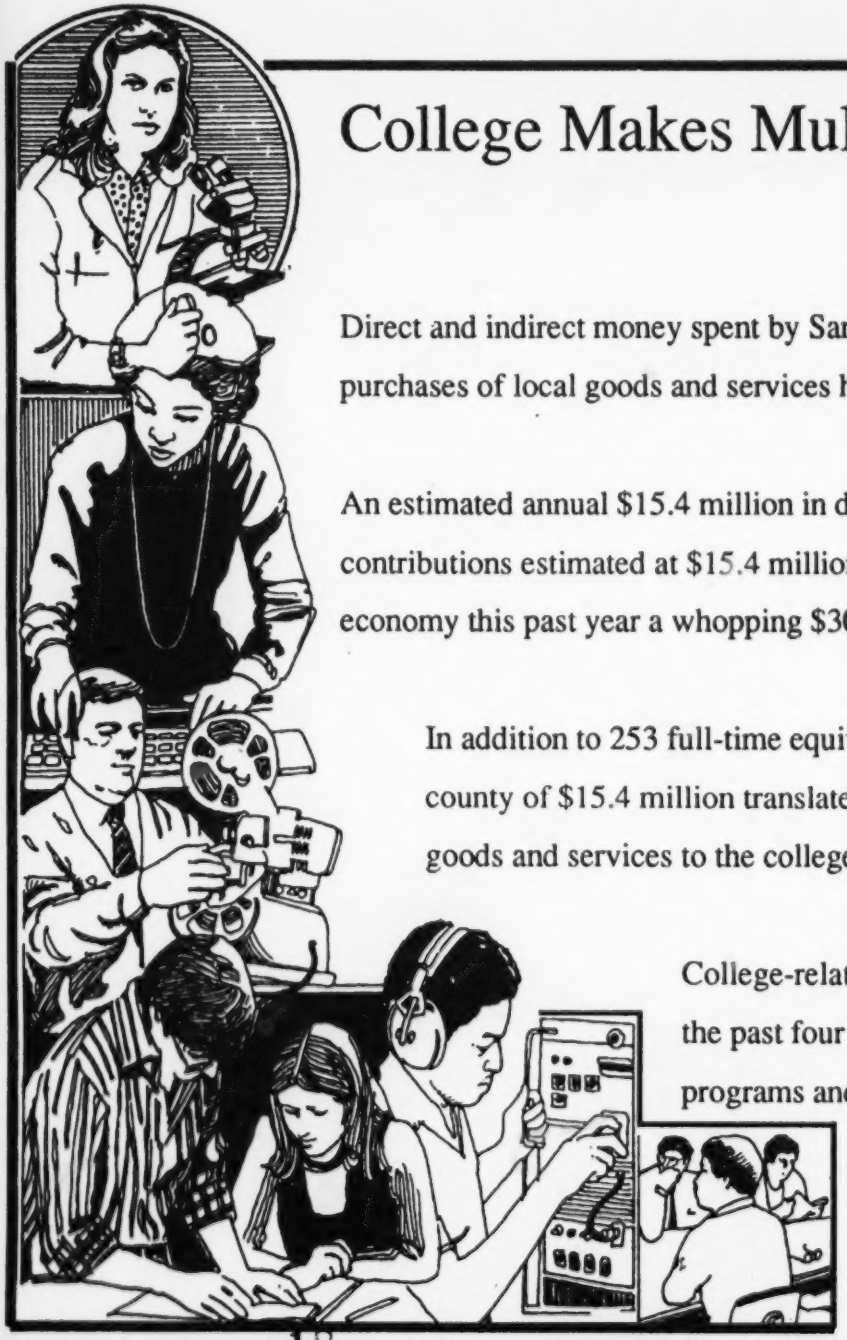
(505) 326-3311

Dr. James C. Henderson, President

Getting Your Money's Worth

San Juan College's
Economic Contribution
to the
Communities It Serves

1991-92



College Makes Multi-Million Dollar Impact

Direct and indirect money spent by San Juan College employees and students, together with college purchases of local goods and services have a tremendous impact on the county economy!

An estimated annual $15.4 million in direct expenditures from these sources, with additional indirect contributions estimated at $15.4 million, makes San Juan College's total contributions to our county economy this past year a whopping $30.8 million.

In addition to 253 full-time equivalent college employees, college-related expenditures in the county of $15.4 million translate to approximately 1,076 more people employed to supply goods and services to the college.

College-related purchases in the county have increased about 50% over the past four years, reflecting increased enrollments and expanded programs and staff. But support from county taxes has increased only 9% over the same period of time.